

79 00990

PROGRAM BUDGETING

George S. Wolfberg

Principal Administrative Analyst
Office of the City Administrative
Officer

City of Los Angeles

Monday, October 26, 1970, 2:15 p.m.

Fire Chiefs' Department

League of California Cities

PROGRAM BUDGETING AROUND THE CORNER - WHAT IS IT, AND ITS IMPACT
ON FIRE DEPARTMENTS?

*Program budgeting
Fire-department Management*

Mr. Chairman, Fire Chiefs of California, Ladies and Gentlemen:

Introduction

Program Budgeting, or Planning, Programming Budgeting System (PPBS), has been a popular topic of discussion in government circles over the past several years. PPBS was introduced into the Department of Defense by Charles J. Hitch, a former Rand Corporation economist and by Secretary Robert McNamara in the early 1960's. In August, 1965 President Johnson announced that PPBS would be extended throughout the Federal Government. In July, 1967, the George Washington University entered into agreements with five cities, five counties and five state governments to demonstrate the feasibility of applying PPB techniques in the participating jurisdictions. The so-called 5-5-5 project was funded partially by a Ford Foundation Grant and partially by participants. Included in the project were the State of California, Los Angeles County and the City of San Diego. These agencies ^{OCT 21 1970} implemented some PPB techniques. Orange County, although not a 5-5-5 participant, is in its second year under a PPBS budget.

79 00990

INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

OCT 10 2024

UNIVERSITY OF CALIFORNIA

format. Other cities in California, including Los Angeles, Fresno and Garden Grove are studying or implementing PPB features. Cities receiving federal funds may find they are persuaded to account for these expenditures in a program format.

So, it appears that this concept may appear in your city before long if it has not already.

PPBS is an evolutionary concept in budgeting. In the beginning there was budgeting by organizational unit by a lump sum technique. In other words so many dollars for the fire department, so much for police, public works, etc.

Today, most budgeting may be placed in one of three categories -- Line Item, Performance, or Program Budgeting.

Line Item, or Object of Expenditure Budgeting appears to be the most widely-used form of fiscal planning and control in state and local governments. This method is an effective tool for controlling expenditures because dollars are allocated and presented by object of expenditure, such as number of personnel, amount of expense, and items of equipment. The Line Item Budget does not emphasize the purpose of the expenditure, and provides no coordination of work accomplishment and cost. However, its



Digitized by the Internet Archive
in 2024 with funding from
State of California and California State Library

<https://archive.org/details/C12331125>

control features have proved so valuable that it often remains part of a performance or program budgeting system.

Performance Budgeting was first implemented in government at the Federal level as a result of the Hoover Commission recommendations of 1949. Under this concept work accomplishment is measured in terms of appropriate units, against a work program based on functions, subfunctions, departments and activities. This was a significant improvement over on the Line Item Budget. The City of Los Angeles currently operates under a Performance Budget retaining the control aspects of the previous system.

What is PPBS?

PPBS or Planning, Programming Budgeting System adds the concept of outputs or effectiveness measures to the efficiency measures contained in Performance Budgeting. Programs of government are defined in terms of basic objectives. In addition, analysis is made in terms of these objectives without consideration of organizational structure.

There is little new in the individual concepts of PPBS. What is new is the combination of a number of these concepts into a package and the attempt to apply the package in total to government resource planning and budgeting.

The primary characteristics of PPBS are:

1. It focuses on identifying the fundamental objectives of the government.
2. Governmental programs are related to these objectives regardless of organizational placement.
3. Future year implications are explicitly defined.
4. All pertinent costs are considered.
5. Systematic analysis of alternatives is performed.

This involves (a) identification of the governmental objectives, (b) explicit, systematic identification of alternative ways of carrying out the objectives, (c) estimation of the total cost implications of each alternative, and (d) estimation of the expected results of each alternative. This also is termed Cost/Benefit analysis.

The first component of a PPB system is a city-wide program structure with the identification of program objectives. A typical structure may include about six to eight major program categories. Activities which relate to a government objectives, mission, purpose, aim or goal -- these terms are interchangeable -- are grouped together. For illustrative purposes, the tentative program structure of the City of Los Angeles is shown.

- * COMMUNITY SAFETY
- * HOME AND COMMUNITY ENVIRONMENT
- * TRANSPORTATION
- * CULTURAL AND RECREATIONAL ACTIVITIES
- * HUMAN RESOURCES, ECONOMIC ASSISTANCE AND DEVELOPMENT
- * GENERAL ADMINISTRATION AND SUPPORT

This structure, incidentally, is quite similar to our existing function structure. Two major program categories depicted in the literature concern Health and Education. However, these are not applicable in many California cities including Los Angeles. The programs carried out by our Fire Department fall under what we call the Community Safety category.

Within each of the major program categories are subcategories and further subdivisions. A major purpose of the program structure is to classify programs with common objectives or outputs into appropriate groupings with the inputs, or total costs, of each identified. As the structure is assembled, the differences and similarities of existing programs are revealed. New alternatives may be identified as well as possible gaps in programs. The program structure also is another way of displaying a budget.

Historically, budgets have been displayed as a series of line items for the control of expenditures. With the expanding use of the "performance budget" in the 1950's an "activity" display was added. This concept is geared to the efficient expenditure of resources committed to a given activity and includes the reporting of units of work accomplished. For example, numbers of inspections made or permits issued. With the establishment of program categories, objectives are identified and results measured in terms of outputs or attainment criteria. The program budget measures effectiveness which is not the same as efficiency. For example, a sewage treatment plant may treat so-many million gallons of sewage per day at a certain cost per million gallons. However, this does not tell us whether the effluent meets any recognized sanitary standard or whether the plant is able to treat all the sewage which requires treatment. The sewage plant may be operating efficiently. However, it may be operating at capacity but only treating 80 percent of the sewage which should be treated. We would say this is not an effective program.

The Los Angeles Fire Department operates an emergency ambulance service. We have much data on the number of responses made but we have not previously received such information as mean response time, location of incident, and number of calls delayed during periods of peak workload. This information is being accumulated and when computer time becomes available we will be in a better position to evaluate the location, staffing patterns and effectiveness of this program. If criteria are established, it will then

be possible to measure performance against the criteria. This has important implications for the manager, the budget officer and the elected official. At the present time evaluation has to be done using time-consuming manual methods. I might add that we are projecting over 110,000 emergency ambulance responses this fiscal year.

Another primary characteristic of PPB is a multi-year program and financial plan. Most decisions made in the current budget will have an impact on future budgets and tend to reduce future budget choices. Construction of a new fire station or purchase of additional heavy apparatus requires future investment of maintenance, operating and personnel dollars. The future consequences of present decisions should be routinely identified and considered during the budget decision process. Outputs, or meaningful measures of achievement or effectiveness for a given program should be set forth in a multi-year perspective in addition to the financial plan.

The next important characteristic of PPB is the consideration of all pertinent costs. All feasible appropriate costs should be considered regardless of the budgetary fund, source of revenue or organizational unit involved. Direct and indirect costs must

be considered. If revenue is involved, the cost of a program may be partially offset. Now accurate determination of costs on a program basis will probably require the implementation of a new or revised cost accounting system. Even then it may not be feasible to accurately determine the cost of a program down to the last dollar. Assumptions will have to be made. Certain overhead factors may have to be placed in a separate general "support" category. In Los Angeles, under our existing performance budget we determine the budgeted cost of such "indirect" items as employee pensions and health plan subsidy, facility design and construction and bond payments as they relate to each of our existing subfunctions. However, we do not have a costing system set up to routinely report our actual experience in these areas. We know how much we have budgeted for workmen's compensation, hydrant rental, building maintenance and repairs, communications and data processing services, for our fire department, for example. However, the application of these support or overhead factors to determine fire suppression or fire prevention program costs will require expanded data processing capability.

The final significant characteristic of a PPB System is the systematic identification and analysis of alternative ways to achieve government objectives. Systematic analysis as it is

called can be an aid to decision making. Program analysis has been divided into two components: (1) definition of the program, and (2) comparison of the cost-effectiveness of feasible alternatives. However, a thorough cost-effectiveness analysis takes time and resources which many cities cannot afford.

Many jurisdictions are carrying out simplified cost-analysis studies with favorable results. For example, last year, the Los Angeles Fire Department's Planning Office conducted an analysis of the operation of the department's rescue and salvage activity. Based upon the findings of this study, it was determined that all but one of the specialized regular rescue squad companies could be eliminated, provided additional salvage gear was placed on each truck company and that a resuscitator was placed on the engine or truck in each station and some men re-assigned to the truck companies to absorb the additional work-load. This had the advantage of placing life saving resuscitation equipment in each station. Truck companies on resuscitation calls could remain in service, leaving one or two men at the scene in case of a fire or other emergency. It also had the advantage of reducing fire protection costs to the citizens of Los Angeles by over \$500,000 per year with no reduction in our fire rating.

Impact on Fire Departments

If PPBS comes to your city, what will be its impact? The first step probably will be identification of the programs in which the fire department participates. Suggested major programs might include:

Fire Suppression or Control

Fire Prevention

Fire Investigation

Or, as in Dade County, Fire Prevention might be stated as a part of "Hazard Prevention"; Fire Suppression as an element of a category, "Abatement of Harm." It is our experience in Los Angeles that elected officials prefer the separation into a "program" of those activities for which a single major objective may be defined. As I mentioned earlier, it is only a matter of semantics whether you call it a program, function, category or what have you.

Objectives should be determined at the same time as programs are identified.

The Objective of Fire Suppression might be to extinguish fires and minimize the extent of damages to persons and property from fires occurring in the city and to reduce the number of fires through annual inspections of all dwellings by station personnel.

The Objective of Fire Prevention might be to reduce the frequency and harmful effects of fires through fire prevention inspections and education.

Another possible objective might be the attainment or maintenance of a Class 2 rating, for example.

Once you have identified programs and objective criteria, how do you demonstrate to yourself and to the budget officer that you are or are not attaining your objectives. The budget officer has the annual problem of finding and allocating the scarce resources known as budget dollars. The manager has the task of evaluating the effectiveness of the units under his command.

We don't claim to know the answer to this one. It is somewhat like the public health doctor who just knew that more visits to a clinic increased the health and well-being of the participating youngsters but couldn't prove it.

Some criteria have been proposed and some criteria applied. Here are some of the better ones that I have come across.

One of the best concerns fire prevention and what happens to the inspected occupancy versus a comparable location not inspected. Does inspection have an impact on fire loss. If so,

how much of an impact. How frequently must inspections be made to retain the impact. Obviously, brush clearance inspections should be on an annual basis. The effectiveness of a fire investigation program might be gauged in terms of persons apprehended or crimes solved.

What about your fire rating versus community fire insurance premiums. Maybe there is a point of diminishing returns in comparison of budget inputs and resultant ratings as compared to the cost of insurance. At that point, insurance premiums become a hidden property tax. It is probably impossible to obtain premium information at the present time. Should cities push to make this information available? It is an interesting prospect.

Efficiency may be measured through compilation of numbers of inspections, responses or investigations.

The determination of the effectiveness of governmental services is one of the more complex problems of the day and implementation of a PPB system in your city will bring it to the surface.

PPBS BIBLIOGRAPHY

Bureau of the Budget, U.S.

Planning-Programming-Budgeting, Bulletin No. 66-3, Oct. 10, 1965;
Supplement to Bulletin No. 66-3, Feb. 21, 1966.

California, State of

Planning and Budgeting System, Governor's Directive, May 16, 1966.

Churchman, C.W., et al.,

Introduction to Operations Research, John Wiley & Sons, New York,
N.Y., 1957.

Committee for Economic Development

Budgeting for National Objectives, January, 1966.

Crumlish, Joseph D.

Notes on the State-of-the-Art of Benefit-Cost Analysis as
Related to Transportation Systems, NBS Technical Note 190,
U.S. Dept. of Commerce, National Bureau of Standards,
November, 1966.

Dorfman, Robert ed.,

Measuring Benefits of Government Investments, The Brookings
Institution, Washington, D.C., 1965.

Eckstein, Otto

Water-Resource Development: The Economics of Project Evaluation,
Harvard University Press, Cambridge, Mass., 1961.

George Washington University State-Local Finances Project:

Notes on PPB, January, 1967.

Same:

Program Planning for State, County, City, January, 1967.

Same:

PPB Pilot Project Reports, February 1969.

Same:

Implementing PPB in State, County City, June 1965.

Grossee, Robert N.

An Introduction to Cost-Effectiveness Analysis, Research
Analysis Corporation, McLean, Va., 100 pp., RAC-7-3, July, 1968.

INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

OCT 3 1977

UNIVERSITY OF CALIFORNIA

Henricks, Harley H. and Taylor, Graeme M.

Program Budgeting and Benefit-Cost Analysis, Goodyear Publishing Company, Inc., Pacific Palisades, Calif., 1969.

Hitch, Charles J., and McKean, Roland N.

The Economics of Defense in the Nuclear Age, Harvard University Press, Cambridge, Mass., 1960.

Joint Economic Committee

The Analysis and Evaluation of Public Expenditures: The PPB System, vol. 2, 3, U.S. Government Printing Office, Washington, D.C., 1969.

Kershaw, J.A., and McKean, R.N.

Systems Analysis and Education, the Rand Corporation, Santa Monica, Calif., October, 1959.

Levine, Robert A.

Systems Analysis in the War on Poverty, Office of Economic Opportunity, paper given to Operations Research Society of America, May 19, 1966.

Marshall, A.W.

Cost/Benefit Analysis in Health, the Rand Corporation, Santa Monica, Calif., December, 1965.

McKean, Roland N.

Efficiency in Government Through Systems Analysis, Publication in Operations Research No. 3; John Wiley & Sons, New York, N.Y., 1958.

Mushkin, Selma J., and Collings, Francis D'A.

Economic Costs of Disease and Injury, Public Health Reports, Public Health Service, U.S. Department of Health, Education, and Welfare, September, 1959.

New York State

Guidelines for Integrated Planning-Programming-Budgeting, Division of the Budget and Office for Regional Development, March, 1966.

Novick, David, ed.

Program Budgeting: Program Analysis and the Federal Budget, Harvard University Press, Cambridge, Mass., 1965.

"Public Administration Review", March/April, 1969
(entire issue devoted to PPBS)

Quade, E.S., ed.

Analysis for Military Decisions, The Rand Corporation, Santa Monica, Calif., 1964.

Quade, E.S.

Some Problems Associated with Systems Analysis, The Rand Corporation, Santa Monica, Calif., June, 1966.

Rice, Dorothy P.

Estimating the Cost of Illness, Health Economics Series No. 6, U.S. Public Health Service.

Schick, Allan

The Road to PPB, the Stages of Budget Reform, Public Information Review, Vol. 26, December, 1966.

Subcommittee on Evaluation Standards

Proposed Practices for Economic Analysis of River Basin Projects, "The Green Book", Report to the Inter-Agency Committee on Water Resources, Washington, D.C., May, 1958.

Trinkl, F.H.

An Integrated Planning-Programming-Budgeting System for State and Local Governments, State and Local Finances Project, George Washington University, July, 1966.

Wildavsky, Aaron

The Politics of the Budgetary Process, Little, Brown, and Co., 1964

79 00990

U.C. BERKELEY LIBRARIES



C123311125

INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

OCT 10 2024

UNIVERSITY OF CALIFORNIA